DOME TECHNOLOGY®

Canola-Pellet Storage

Louis Dreyfus Company | Yorkton, Saskatchewan, Canada

The DomeSilo™ is an ideal combination of structural integrity and storage capacity on space constrained sites.

A Model 1566 Ladig reclaim screw was part of a first-of-its-kind reclaim system designed for Louis Dreyfus.

As a result of its geometry, a dome can support sizable structures like a headhouse and conveyors at the apex.

Scope of Work

- ○ FEED Study
- ◒ Value Engineering
- ● Geotechnical Analysis
- ◒ Material-Handling Systems Engineering
- ● Structural Engineering
- ◒ Mechanical Engineering
- ◒ Electrical Engineering
- ◒ Procurement & Subcontract Management
- ● Dome Construction
- ● Tunnels Construction
- ◒ Material-Handling Systems Installation
- ○ Explosion Relief Installation
- ◒ Additional Steel & Concrete Construction

○ None ◒ Some ● All

Storage & Reclaim

1 dome: 33.5m (110ft) wide x 35.4m (116ft) tall

15,000 metric tons, canola

Mechanical screw, 1 tunnel
37% live reclaim

Overview

Global commodities merchandizer and agricultural-goods processor Louis Dreyfus selected a DomeSilo™ for canola-pellet storage in Yorkton, Saskatchewan, Canada. The DomeSilo™ shell was completed April 2016. The Dome Technology team provided the dome, engineering, tunnels, and mechanical systems. The design-build approach lends itself to customization; it benefits the customer and promotes flexibility, even during construction.

"One of our strengths as a design-build team is our ability to adapt to changes and implement them in a short time frame. Our working relationship with the owner and design team creates the dynamic needed to make these changes possible during the construction process and goes a long way in mitigating the financial pain associated with delays due to these design changes," said Daren Wheeler, Dome Technology project manager.

Part of the unique Yorkton design was the first-of-its-kind reclaim system, including a 107-foot Model 1566 Laidig reclaim screw meeting the specific project parameters and the reclaim needs for canola, said Laidig vice president of marketing Michael Lacognato.

Historically Louis Dreyfus has utilized silo packs of 10 to 12, but the company selected Dome Technology after determining a concrete dome would be the best solution for its canola storage needs at the Yorkton site, said Louis Dreyfus project manager Ross McEllhiney. "This is our first time in using concrete domes for this type of storage, and Dome Technology was determined to be the most qualified for this application and location," he said.

Bradley Bateman, CEO at Dome Technology remarked, "For nearly four decades we've relied on a collaborative approach with companies—they're in the driver seat, and we help navigate. In every project Dome Technology incorporates innovative technology to maximize storage capacity and system performance with an economical solution."

Read more about this project at: link.dometechnology.com/6371